



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

Office of Preparedness & Response
Sherry Adams, R.N., C.P.M, Director
Isaac P. Ajit, M.D., M.P.H., Deputy Director

December 02, 2008

Public Health & Emergency Preparedness Bulletin: # 2008:48 **Reporting for the week ending 11/29/08 (MMWR Week #48)**

CURRENT HOMELAND SECURITY THREAT LEVELS

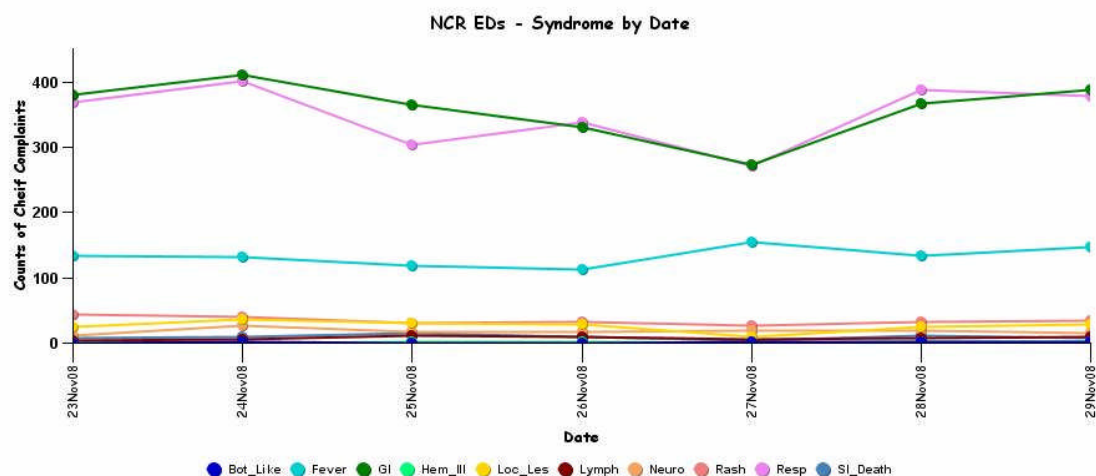
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

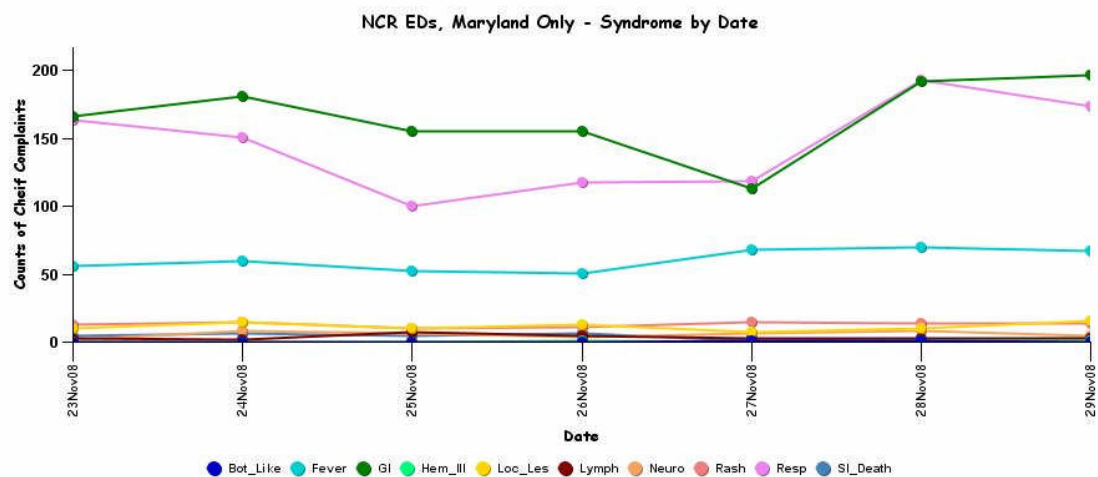
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

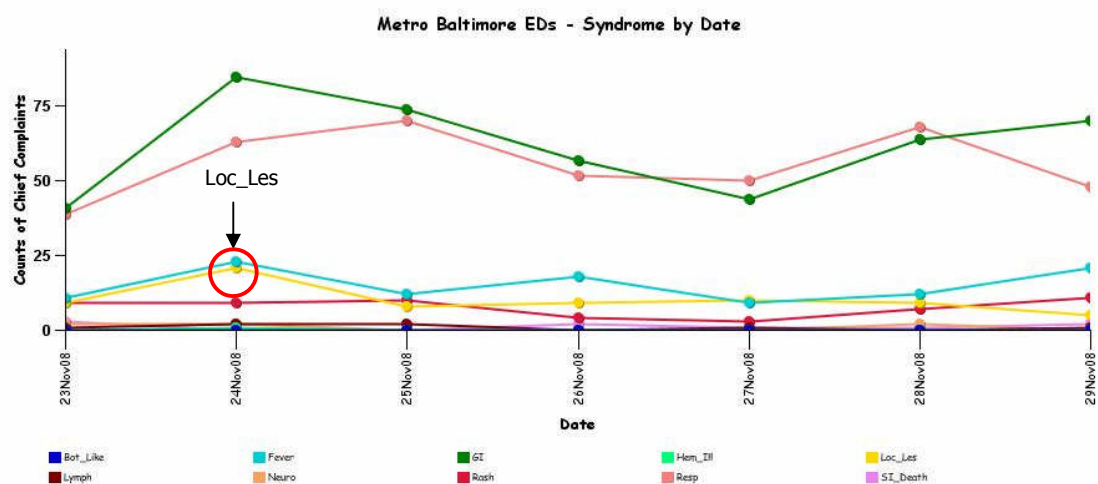
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system



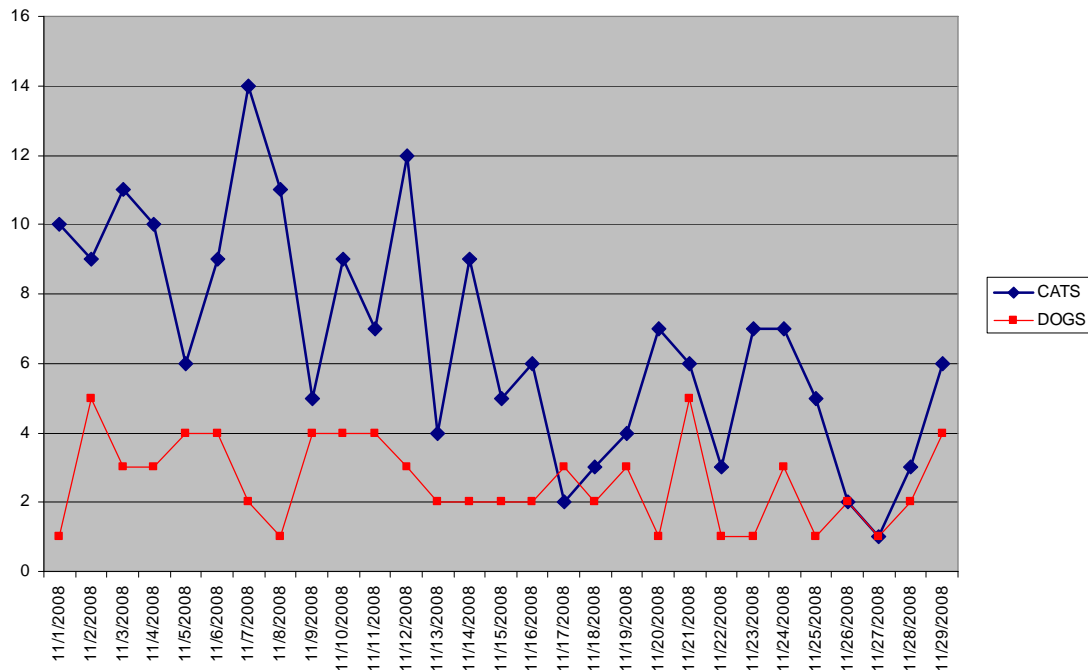
* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

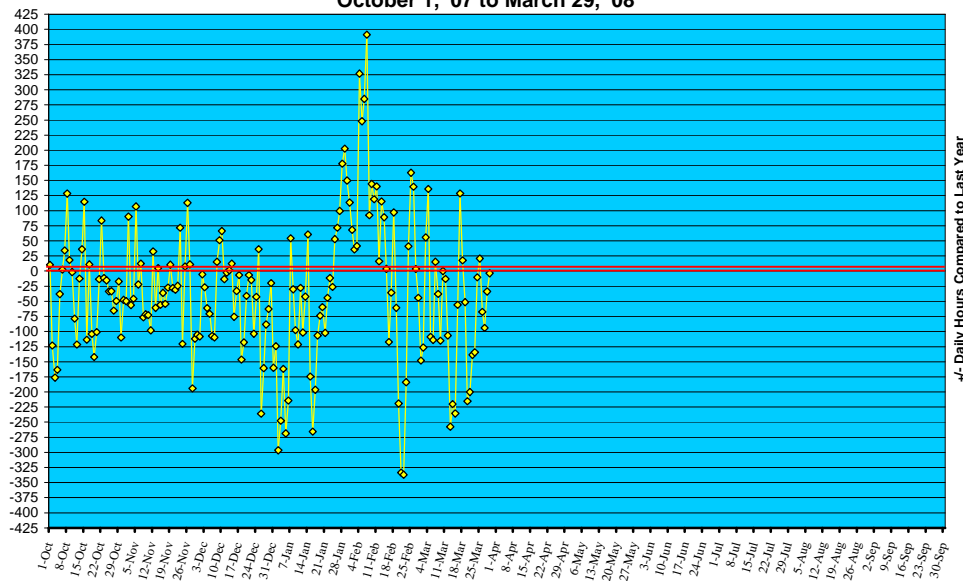
YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.

*Note: No new data available at this time.

Statewide Yellow Alert Comparison

Daily Historical Deviations

October 1, '07 to March 29, '08



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Nov 23 - 29, 2008):	12	1
Prior week (Nov 16 - 22, 2008):	10	0
Week#48, 2007 (Nov 26 – Dec 1, 2007):	11	0

5 outbreaks were reported to DHMH during MMWR Week 48 (Nov. 23- Nov. 29, 2008):

4 Gastroenteritis outbreaks

2 outbreaks of GASTROENTERITIS associated with Nursing Homes

1 outbreak of GASTROENTERITIS associated with an Institution

1 outbreak of GASTROENTERITIS associated with a School Group

1 Foodborne outbreak

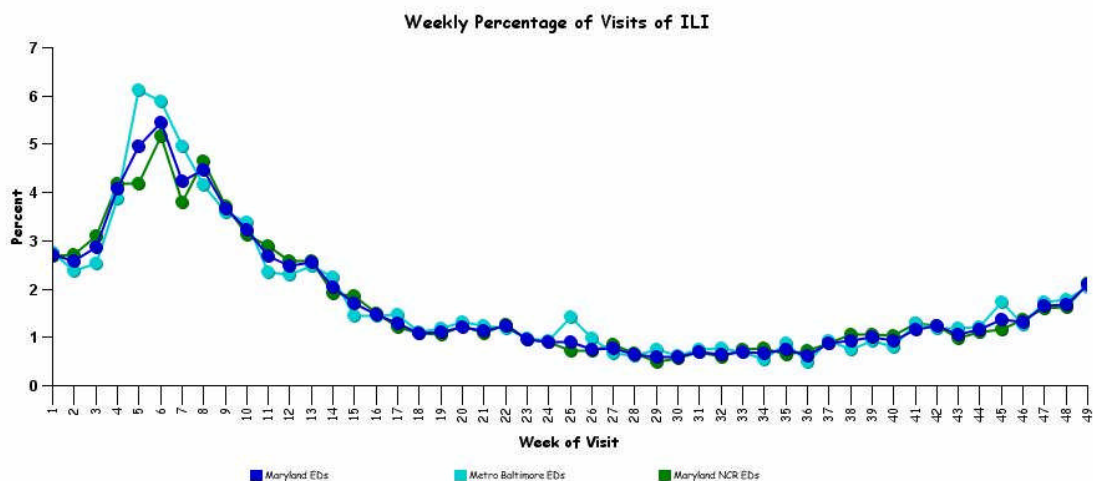
1 outbreak of SCOMBROID POISONING associated with a Private Home

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. There were 13 lab-confirmed case of influenza reported to DHMH during Week 48. The season total is now 19.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: <http://bioterrorism.dhmm.state.md.us/flu.htm>

WHO update: As of September 10, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 387, of which 245 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA, HUMAN (THAILAND): 27 Nov 2008. More than 300 poultry birds have died in the past 5 days in some villages in Assam, fuelling fears of bird flu, officials said [in Guwahati] Wednesday [26 Nov 2008], adding that a general alert was sounded in the area. A veterinary department official said up to 300 chicken and ducks died an unnatural death in some villages around Hajo, about 35 km (22 mi) west of Assam's main city of Guwahati. "We have sent samples for laboratory tests to Pune and Bangalore for confirmation. We don't know for sure if the poultry deaths were due to bird flu," a veterinary department official said requesting not to be named. Authorities Wednesday [26 Nov 2008] imposed a ban on sale of poultry and have sounded a general alert in about 40 villages in a radius of 5 km (3.1 mi) from the area where the deaths were reported. "By Thursday [27 Nov 2008] we shall be getting the laboratory test reports and maybe we have to start the culling process as there has been large-scale reports of deaths coming in from nearby areas," Kamrup district magistrate RC Jain said. "We have imposed a ban on sale and purchase of poultry and have asked people in the area not to consume chicken or duck as a precautionary measure." A general health alert was also sounded in the area. Teams of experts are now camping in the area and were contemplating culling birds as a precautionary measure. Residents of the area said a large number of birds were falling sick. "We saw normal birds dying almost instantly without any symptoms. Now we find some of the poultry in the area a little sick," said Biswa Das, a villager.

NATIONAL DISEASE REPORTS:

No New disease outbreaks were reported for CDC Critical Biological Agents for MWWR week 48.

INTERNATIONAL DISEASE REPORTS:

HEMORRHAGIC FEVER WITH RENAL SYNDROME (RUSSIA): 29 Nov 2008. A total of 2 cases of hemorrhagic fever with renal syndrome (HFRS) have been registered in the Danilovsk region. Rodents are the source of this infection. This is not an epidemic yet but there are issues for concern. This infection is a dangerous one and the reservoir is in the natural environment. The risk of infection increases in autumn, when plant and hay storage facilities are full. Early diagnosis is difficult because of non-specific signs and symptoms. Epidemiologists recommend that particular attention should be paid to possible contacts with rodents. In addition, 3 more regions are also affected with HFRS: the Uglickskoe, Rostovskoe and Lyubimskoe regions. The public health authorities forecast that the incidence will decrease during the winter but will increase again in spring when rodents begin to breed again. (Viral hemorrhagic fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM, WOUND, DRUG-RELATED (IRELAND): 28 Nov 2008. Health professionals have been urged to look out for signs of the serious but rare disease botulism, after 4 injecting drug users presented with suspected cases. The Health Protection Surveillance Centre (HPSC) and the HSE [Health Service Executive] in the eastern region have been informed that the cases of wound botulism are under investigation. The disease, in this case, is caused when spores of the organism *Clostridium botulinum* get into an open wound. Specialist in public health medicine Dr Suzanne Cotter said: "This is a rare condition and we are waiting for further test results to confirm these cases. Wound botulism is caused by a toxin that is commonly produced by soil bacteria. The illness can result if a wound is contaminated by soil or gravel. In recent years this type of botulism has been most commonly reported among chronic drug users. It occurs mainly in skin abscesses from injecting heroin. Botulism has previously been reported in drug users, but few cases are seen in Ireland, according to the HPSC. "The last cases of botulism in drug users occurred in 2002 when 3 injecting drug users developed botulism," Dr Cotter said. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BOVINE, HUMAN (ZIMBABWE): 28 Nov 2008. A surge in anthrax has also hit the south of Zimbabwe, claiming the lives of villagers and their livestock. Matabeleland North provincial medical director, Dr Gibson Mhlanga, confirmed the deaths of 2 people from anthrax, but a report in the official The Chronicle newspaper said 6 had died and over 200 cattle had been wiped out in the province's Dongamuzi area near Lupane, 120 km (74.6 mi) north of Bulawayo, Zimbabwe's 2nd city. The government dispatched its disaster management Civil Protection Unit (CPU) to Lupane last week [week of 17 Nov 2008] to work with the Veterinary Services Department to vaccinate affected cattle in a bid to

contain the disease. Anthrax will further strain Zimbabwe's crumbling health delivery system. Medical officials in Lupane said the people who had succumbed to anthrax over the past week had eaten meat from infected cattle; several other villagers in the district have been hospitalised. Villagers in the Lupane area who spoke to IRIN said they had lost a considerable number of livestock to the rapid onset infection, which is hard to detect in its early stages. "My entire kraal [enclosure for cattle or other livestock] was almost wiped out and the few cattle that I have remaining have been vaccinated [but] I am not sure whether the 7 remaining cattle I have left will not die also," said Matthew Ncube, 57, who had already lost 35 of his animals. Ephraim Moyo pointed out that the risk of human infection was rising with the approach of the festive season. "People eat a lot of meat, and the problem is that people in the village do not throw away cattle that die ... they eat the meat." The outbreak is causing serious concern in Bulawayo, where most people buy their meat from unlicensed butcheries that source the animals from rural areas like Lupane. "Ever since the outbreak of anthrax I have not been buying meat from the vendors I normally buy from, as the meat that they bring from rural areas is not inspected," said Bulawayo resident Ndabezihle Sibanda. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (INDONESIA): 26 Nov 2008. For several weeks (chikungunya virus infection) became epidemic in the Bengkalis community. Currently, the illness that is spread by mosquitoes has become epidemic in the Indragiri Hulu (Inhu) regency. In this last week several residents of Inhu suffered chikungunya (virus) illness. Cases were reported in several places, including West Rengat and Lirik. From results of the team's inspection of the health in the area, they indeed suspected (that the residents) were infected by chikungunya (virus). The Head of the Health Section in Inhu, Helmi A Manaf, confirmed that the chikungunya illness had become an epidemic in his area. "This is just the 1st time that this illness has been found in Inhu and we were trying to anticipate it," he said. He said the health officials from Diskes and the community health centre were sent to villages to give medical treatment to the sufferers, and give counseling but also will do fogging. "We hope the outbreak of the illness will not increasingly spread in the Inhu community," he explained. In counseling that was carried out, the community was urged to always maintain the cleanliness of the environment and avoid [water-holding locations that can become a breeding site for mosquitoes.] "We are not only trying to combat the chikungunya outbreak, but also the outbreaks of dengue fever," he added. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BOVINE (JORDAN): 23 Nov 2008. The Ministry of Agriculture has imposed quarantine on a livestock farm in the Dulayl area in Zarqa, where a case of anthrax was detected. Despite a senior ministry official's assurances that the situation is under control, experts and other officials warned that the procedures taken do not guarantee that the problem has ended. The case was reported last week [10-14 Nov 2008] following the sudden death of a cow. Ministry teams responded by conducting the required laboratory tests, Assistant Secretary General for Livestock Affairs Nasser Hawamdeh told The Jordan Times on Saturday [22 Nov 2008]. Hawamdeh said the tests confirmed that "the causative agent of anthrax disease" was found in the samples examined. To ensure that the agent is not transmitted to other cows, "we destroyed and burned the dead body, sterilised the area, and referred all farm workers for a medical checkup," the official said, stressing that there will be no negative impact from this case. According to Hawamdeh, who described the situation as "not very scary," cases of anthrax are not unfamiliar. "The ministry discovers and successfully deals with a few cases every year. We work to prevent the movement of animals outside the affected area for up to 21 days, which is the period required for quarantine," Hawamdeh said. But another official familiar with the procedures, who spoke on condition of anonymity, questioned the validity of the veterinary measures implemented, starting from the diagnosis of the disease. "The vet who dealt with the case applied the wrong procedure because he performed an [necropsy] on the infected cow, a procedure that shouldn't have been done when dealing with an anthrax case," the source said, explaining that direct contact with the infected animal leads to the transfer of the anthrax bacteria to humans. Instead, he said, the cow should have been burned and buried 2 metres [7 feet] deep at least. According to Hawamdeh, the infection might have been transmitted from immigrant birds, or from fodder, noting that the farm is a "model one that applies all required sterilisation procedures". This theory adds to the seriousness of the case, another official source, who also requested to be unnamed, told The Jordan Times. "If the infection was caused by immigrant birds or from the fodder, it means the condition is so serious, since this bacterium can easily affect the soil and surrounding environment," he said. When asked if there was any risk to consumers' health, the ministry official said: "I will not answer this question." The Jordan News Agency, Petra, quoted the farm director, keeping his identity anonymous, as denying that the cow died of anthrax, adding that the 1800 livestock at the farm were injected with several vaccines, including anti-anthrax one year ago. However, livestock should be injected on an annual basis, the 1st source said. He added that the bacteria infected the animals on the farm because they were not given the requested vaccinations on time. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhnh.state.md.us/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every

activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Heather N. Brown, MPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
201 W. Preston Street, 3rd Floor
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: HBrown@dhmh.state.md.us

Sadia Aslam, MPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
201 W. Preston Street, 3rd Floor
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: SAslam@dhmh.state.md.us